NRDC
THE EARTH'S BEST DEFENSE

NATURAL RESOURCES DEFENSE COUNCIL

September 19, 2012

Manucher Alemi
Chief, Water Use and Efficiency Branch
Division of Statewide Integrated Water Management
Department of Water Resources
901 P Street
Sacramento, CA 95814

Dear Mr. Alemi:

On behalf of its members and activists in California, the Natural Resources Defense Council ("NRDC") would like to express concern with some aspects of the draft Guidebook to Assist Agricultural Water Suppliers to Prepare a 2012 Agricultural Water Management Plan ("Guidebook"), which was released by the Department of Water Resources ("DWR") on Sept. 10, 2012. NRDC is concerned that the Net Benefit Analysis recommended by the Guidebook is overly broad. Local cost effectiveness and technical feasibility are the only factors suppliers are allowed to consider when determining whether they are exempt from adopting an efficient water management practice ("EWMP"). The Net Benefit Analysis considers more than those permissible factors and could lead suppliers afoul of the statutory requirements for completing an Agricultural Water Management Plan, causing suppliers to lose their eligibility for state grant and loan funding.

I. The Guidebook Should Clarify the Definitions of "Locally Cost Effective" and "Technically Feasible."

The California Water Conservation Act of 2009 ("SB x7-7") states that "agricultural water suppliers *shall* implement additional efficient management practices[1] ...if the measures are

[1] These "conditional" EWMPs include: 1) facilitate alternative land use for lands with exceptionally high water duties or whose irrigation contributes to significant problems, including drainage, 2) facilitate use of available recycled water that otherwise would not be used beneficially, meets all health and safety criteria, and does not harm crops or soils, 3) facilitate the financing of capital improvements for on-farm irrigations systems, 4) implement and incentive pricing structure that promotes one or more of the following goals, a) more efficient water use at the farm level, b) conjunctive use of groundwater, c) appropriate increase of groundwater recharge, d) reduction in problem drainage, e) improved management of environmental resources, f) effective management of all water sources throughout the year by adjusting seasonal pricing structures based on current conditions, 5) expand line or pipe distribution systems, and construct regulatory reservoirs to increase distribution system flexibility and capacity, decrease maintenance, and reduce seepage, 6) increase flexibility in water ordering by, and delivery to, water customers within operational limits, 7) construct and operate supplier spill and tailwater recovery systems, 8)

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locally cost effective and technically feasible."[2] The Guidebook accurately points out that these EWMPs must be implemented by agricultural water suppliers providing water to at least 25,000 acres ("large suppliers"), and by water suppliers providing water to 10,000 to 25,000 acres if funding is available.[3] Local cost ineffectiveness and technical infeasibility are the only permissible exceptions to the rule that suppliers providing water to 25,000 acres or more shall adopt all 14 conditional EWMPs.

EWMPs are "locally cost effective" when the "present value of the local benefits of implementing an agricultural efficiency water management practice is greater than or equal to the present value of the local cost of implementing that measure."[4] "Present value" in this context, should be given its generally accepted economic definition—the present value of a future stream of benefits (or costs), with the benefits (or costs) in future years discounted at an appropriate interest rate.[5] This definition allows for a comparison of benefits and costs that occur in different points of time to be expressed in current dollars for purposes of comparison and best serves the purpose of a multi-year cost-effectiveness evaluation. Because the Legislature intended to "establish *consistent* water use efficiency planning and implementation standards for...agricultural water suppliers,"[6] present value should be read by all suppliers to have this widely accepted economic meaning.

"Technically feasible" is not defined in SB x7-7, so it should be given its plain meaning definition in order to further the Legislature's intention of consistent water use efficiency planning and implementation standards.[7] The plain meaning of "technical" is "of or relating to a particular subject."[8] The plain meaning of "feasible" is "capable of being done or carried out."[9] "Technically feasible" in this context should be read to mean achievable water use efficiency

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increase planned conjunctive use of surface water and groundwater within the supplier service area, 9) automate canal control structures, 10) facilitate or promote customer pump testing and evaluation, 11) designate a water conservation coordinator who will develop and implement the water management plan and prepare progress reports, 12) provide for the availability of water management services to water users. These services may include, but are not limited to, all of the following: a) on-farm irrigation and drainage system evaluations, b) normal year and real-time irrigation scheduling and crop evaoptransipiration information, c) surface water, groundwater, and drainage water quantity and quality data, d) agricultural water management educational programs and materials for farmers, staff, and the public, 13) evaluate the policies of agencies that provide the supplier with water to identify the potential for institutional changes to allow more flexible water deliveries and storage, 14) evaluate and improve the efficiencies of the supplier's pumps. Cal. Water Code § 10608.48(c).

[2] Id. *Emphasis added.*

[3] Cal. Dep't of Water Res., *A Guidebook to Assist Agricultural Water Suppliers to Prepare a 2012 Agricultural Water Management Plan* (Sept. 10, 2012 draft), page 53, [hereinafter *Guidebook.*]

[4] Cal. Water Code § 10608.12(k).

[5] *See, e.g.*, Financial Accounting Standards Board, *Statement of Financial Accounting Concepts No. 7: Measuring Cash Flow Information and Present Value in Accounting Measurements* (2008), *available at* http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156317989.

[6] Cal. Water Code § 10608.4(e).

[7] Id.

[8] Merriam-Webster's Collegiate Dictionary 1210 (10th ed. 1994). In this case, the "subject" is water use efficiency.

[9] Merriam-Webster's Collegiate Dictionary 425 (10th ed. 1994).

improvements, given the technology, materials, and labor available.[10] This should be a separate inquiry from financial considerations. For example, if the technology exists to "increase flexibility in water ordering by, and delivered to, water customers within operational limits," this EWMP should be considered technically feasible even if a particular supplier has not yet invested in that technology. The cost of purchasing and operating the technology should be reflected in the "locally cost effective" assessment, described above.

DWR should clarify the definition of these two important terms in the final Guidebook.

II. The Net Benefit Analysis Recommended by the Guidebook Improperly Considers More than Local Cost Effectiveness and Technical Feasibility.

Any considerations beyond local cost effectiveness and technical feasibility when determining whether a supplier must adopt an EWMP are contrary to SB x7-7. The Guidebook improperly suggests that suppliers use the Net Benefit Analysis described in Exhibit E of the 1999 AWMC-MOU to determine whether suppliers must adopt conditional EWMPs.[11]

The Net Benefit Analysis described in Exhibit E of the MOU is broader than SB x7-7 allows. The only permissible exceptions to the rule that large suppliers must implement all 14 conditional EWMPs are if those EWMPs are not locally cost effective or not technically feasible. Exhibit E goes beyond determining local cost effectiveness and technical feasibility to consider environmental effects,[12] third party effects,[13] and indirect economic effects.[14] These are valid considerations in the design and management of specific measures, but not in the determination of whether EWMPs are required to be implemented in a specific district. They should not be used to determine whether a supplier must implement a conditional EWMP.

If DWR decides to retain its suggestion that suppliers rely on Exhibit E's Net Benefit Analysis, DWR should clarify that the only applicable portion of Exhibit E is Part 5: Economic Analysis.[15] Part 5 of the Net Benefit Analysis appropriately compares the present value of potential water conservation to the present cost of adopting an EWMP. This analysis is consistent with SB x7-7's requirements.

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[10] *See, e.g.*, Food and Agriculture Organization of the United Nations, *Guidelines for small-scale fruit and vegetable processers*, Chapt. 2.3, *available at* http://www.fao.org/docrep/W6864E/w6864e09.htm#2.3.3. technical feasibility (defining technical feasibility in an agricultural business context).
[11] Guidebook, page 56.
[12] Agric. Water Mgmt. Council, *Memorandum of Understanding Regarding Efficient Water Management Practices by Agricultural Water Suppliers in California*, page E-15 (Jan. 1, 1999), *available at* http://www.agwatercouncil.org/images/stories/pdfs/awmcmou.pdf [hereinafter *MOU*].
[13] MOU, page E-19.
[14] MOU, page E-21.
[15] MOU, page E-24

III. The Guidebook should be Revised to Recognize that Local Cost Effectiveness and Technical Feasibility are the Only Permissible Considerations to Determine whether Suppliers Must Implement EWMPs.

DWR should revise the Guidebook to clarify that local cost effectiveness and technical feasibility are the only possible exceptions to the rule that large suppliers adopt all 14 conditional EWMPs. DWR should not recommend that suppliers use the Net Benefit Analysis described in Exhibit E of the MOU because it improperly considers factors beyond local cost effectiveness and technical feasibility. Suppliers who improperly rely on DWR's recommendation to use the Net Benefit Analysis risk running afoul of SB x7-7's requirements and losing eligibility for state grant and loan funding.[16] If DWR decides to include Net Benefit Analysis in the Guidebook, DWR should clarify that suppliers should only utilize the economic analysis contained in Part 5 of the Net Benefit Analysis.

As the Legislature noted when it adopted SB x7-7, "the conservation of agricultural water supplies is of great statewide concern."[17] Agricultural Water Management Plans are a potentially valuable tool to help suppliers balance the benefits of water conservation practices with the financial cost of implementing those practices. By relying on Exhibit E, the current Guidebook fails to accurately inform suppliers of SB x7-7's requirement that all 14 EWMPs must be adopted unless they are not locally cost effective or not technically feasible. DWR should revise the Guidebook to ensure it effectively informs suppliers about planning requirements contained in the law and advises them on how to properly determine which practices they must implement.

We trust you will take our comments under advisement and include an accurate description of how suppliers should determine local cost effectiveness and technical feasibility in the final Guidebook.

Sincerely,

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[16] Cal. Water Code § 10852.
[17] Cal. Water Code § 10801(d).